

-2-

Serial No. 09/376,651  
Docket No. JA998073  
Firm No. 0036.0066

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Cancelled)
2. (Previously Presented) A medium feeding apparatus comprising:  
at least one align roller to align a medium in a path, wherein the medium is positioned in a plane defined by a first axis and a second axis, wherein the align roller is positioned below the medium and is driven to transport the medium in the path along the second axis; and  
a feed assistance member comprising:
  - (i) a shaft; and
  - (ii) a feed assistance roller rotably mounted to the shaft and positioned to apply pressure on the medium in the path to stabilize the medium while the medium is being aligned in the path by the at least one align roller, wherein the feed assistance member is not rotably connected to the align roller, and wherein the feed assistance member and the at least one align roller are offset with respect to the second axis and wherein the feed assistance member and the at least one align roller both rotate along the second axis.
3. (Previously Presented) A medium feeding apparatus, wherein the medium is positioned in a plane defined by a first axis and a second axis, comprising:  
at least one second axis align roller to align the medium along the second axis;  
first axis align roller to align the medium along the first axis; and  
a feed assistance member comprising:
  - (i) a shaft; and
  - (ii) a feed assistance roller rotably mounted to the shaft and positioned to apply pressure on the medium in the path to stabilize the medium while the medium is being aligned in the path by the at least one second axis align roller, wherein the feed assistance

-3-

Serial No. 09/376,651  
Docket No. JA998073  
Firm No. 0036.0066

member is not rotably connected to the align rollers, wherein the feed assistance member and the at least one second axis align roller are offset with respect to the second axis, and wherein the feed assistance member is mounted between one first axis align roller and one second axis align roller.

4. (Previously Presented) The medium feeding apparatus of claim 2, wherein the at least one align roller has a non-circular cross section for feeding the medium.
5. (Previously Presented) The medium feeding apparatus of claim 3, wherein the feed assistance member is aligned along the second axis.
6. (Currently Amended) The medium feeding apparatus of claim 2, wherein the feed assistance member further comprises:  
two brackets including open grooves, wherein the shaft is disposed in the grooves of the bracket brackets.
7. (Previously Presented) The medium feeding apparatus of claim 2, wherein the total weight of the feed assistance roller is applied onto the medium.
8. (Previously Presented) The medium feeding apparatus of claim 6, further comprising a spring for urging the feed assistance roller onto the medium.
9. (Previously Presented) The medium feeding apparatus of claim 6, wherein the medium is paper.
10. (Currently Amended) A medium processing device including a medium feeding apparatus to feed the medium through a feed path in the processing device, wherein the medium is

-4-

Serial No. 09/376,651  
Docket No. JA998073  
Firm No. 0036.0066

positioned in a plane defined by a first axis and a second axis, and wherein the medium feeding apparatus comprises:

at least one align roller to align a medium in a path, wherein the one align roller is positioned below the medium and is driven to transport the medium in the path along the second axis; and

a feed assistance member comprising:

(i) a shaft; and

(ii) a feed assistance roller rotably mounted to the shaft and positioned to apply pressure on the medium in the path to stabilize the medium while the medium is being aligned in the path by the at least one align roller, wherein the feed assistance member is not rotably connected to the align roller, and wherein the feed assistance roller and the at least one align roller are offset with respect to the second axis and wherein the feed assistance roller and one align roller both rotate along the second axis.

11. (Previously Presented) The medium processing device of claim 10, wherein the processing device comprises a printer and the medium comprises paper.

12. (Previously Presented) A medium processing device including a medium feeding apparatus to feed the medium through a feed path in the processing device, wherein the medium is positioned in a plane defined by a first axis and a second axis, and wherein the medium feeding apparatus comprises:

at least one second axis align roller to align the medium along the second axis;

a first axis align roller to align the medium along the first axis;

a feed assistance member comprising:

(i) a shaft; and

(ii) a feed assistance roller rotably mounted to the shaft and positioned to apply pressure on the medium in the path to stabilize the medium while the medium is being aligned in the path by the at least one second axis align roller, wherein the feed assistance

-5-

Serial No. 09/376,651  
Docket No. JA998073  
Firm No. 0036.0066

member is not rotably connected to the at least one second axis align roller, wherein the feed assistance roller and the at least one second axis align roller are offset with respect to the second axis, and wherein the feed assistance member is mounted between the first axis align roller and one of the at least one second axis align roller.

13. (Previously Presented) The medium processing device of claim 10, wherein the at least one align roller has a non-circular cross section for feeding the medium.

14. (Previously Presented) The medium processing device of claim 12, wherein the feed assistance member is aligned along the second axis.

15. (Currently Amended) The medium processing device of claim 10, wherein the feed assistance member further comprises

two brackets including open grooves, wherein the shaft is disposed in the grooves of the bracket brackets.

16. (Previously Presented) The medium processing device of claim 10, wherein the total weight of the feed assistance roller is applied onto the medium.

17. (Previously Presented) The medium processing device of claim 15, further comprising a spring for urging the feed assistance roller onto the medium.

18. (Previously Presented) A feed assistance apparatus for feeding a medium in a medium processing apparatus, comprising:

at least one align roller for feeding the medium, wherein the medium is positioned in a plane defined by a first axis and a second axis, and wherein the align roller is positioned below the medium and is driven to transport the medium in the path along the second axis;

-6-

Serial No. 09/376,651  
Docket No. JA998073  
Firm No. 0036.0066

a member portion contacting said medium being fed to increase a frictional force generated on the medium while the medium is being aligned in the path by the at least one align roller;

wherein the member portion is not rotably connected to the at least one align roller, wherein the member portion and the at least one align roller are offset with respect to the second axis and wherein the member portion and the at least one align roller both rotate along the second axis.

19. (Previously Presented) A feed assistance apparatus for feeding a medium in a medium processing apparatus, comprising:

at least one align roller for feeding the medium, wherein the medium is positioned in a plane defined by a first axis and a second axis and transported along the second axis;

a member portion contacting said medium being fed to increase a frictional force generated on the medium while the medium is being aligned in the path by the at least one align roller;

wherein the member portion is not rotably connected to the at least one align roller, and wherein the member portion and the at least one align roller are offset with respect to the second axis, and wherein the member portion is non-rotatable.

20. (Previously Presented) The feed assistance apparatus of claim 18, further comprising a shaft portion supported in a bracket and disposed through said member portion, wherein the member portion rotates around said shaft portion so as to move by a force from said medium, wherein the shaft portion is not rotably connected to the at least one align roller.

21. (Previously Presented) A feed assistance apparatus for feeding a medium in a medium processing apparatus, wherein the medium is positioned in a plane defined by a first axis and a second axis, comprising:

at least one second axis align roller to align the medium along the second axis;

-7-

Serial No. 09/376,651  
Docket No. JA998073  
Firm No. 0036.0066

a first axis align roller to align the medium along the first axis;  
a member portion contacting said medium being fed to increase a frictional force generated on the medium while the medium is being aligned by the align rollers; and  
wherein the member portion is not rotably connected to the align rollers, and wherein the member portion and the at least one second axis align roller are offset with respect to the second axis, and wherein the member portion is mounted between the first axis align roller and one of the at least one second axis align roller.

22. (Previously Presented) The feed assistance apparatus of claim 18, wherein the at least one align roller has a non-circular cross section for feeding the medium.

23. (Previously Presented) The feed assistance apparatus of claim 18, wherein the member portion is aligned along the second axis with respect to medium movement.

24. (Previously Presented) The feed assistance apparatus of claim 18, wherein the medium is paper.

25. (Previously Presented) The feed assistance apparatus of claim 18, wherein the member portion does not contact any align roller when the medium is not contacting the member portion.

26. (Previously Presented) The feed assistance apparatus of claim 21, wherein the at least one second axis align roller comprises two second axis align rollers, and wherein the feed assistance roller is further mounted between the two second axis align rollers.

27. (Previously Presented) The medium feeding apparatus of claim 2, wherein the feed assistance roller does not contact any align roller when the medium is not positioned in the path.

-8-

Serial No. 09/376,651  
Docket No. JA998073  
Firm No. 0036.0066

28. (Previously Presented) The medium feeding apparatus of claim 3, wherein the at least one second axis align roller comprises two second axis align rollers, and wherein the feed assistance roller is further mounted between the two second axis align rollers.

29. (Previously Presented) The feed assistance apparatus of claim 18, wherein the member portion does not contact any align roller when the medium is not positioned in the path.

30. (Previously Presented) The medium processing device of claim 10, wherein the feed assistance roller does not contact any align roller when the medium is not positioned in the path.

31. (Previously Presented) The medium processing device of claim 12, wherein the at least one second axis align roller comprises two second axis align rollers, and wherein the feed assistance roller is further mounted between the two second axis align rollers.

32. (Currently Amended) The medium feeding apparatus of claim 2, wherein the feed assistance member and the at least one align roller ~~contacts~~ contact the medium while the medium is moving along the second axis.

33. (Previously Presented) The medium feeding apparatus of claim 2, wherein the feed assistance member rotates and applies pressure to the medium in response to contacting the medium being moved by the at least one align roller.

34. (Previously Presented) The medium processing device of claim 10, wherein the feed assistance member and the at least one align roller contacts the medium while the medium is moving along the second axis.

-9-

Serial No. 09/376,651  
Docket No. JA998073  
Firm No. 0036.0066

35. (Previously Presented) The medium processing device of claim 10, wherein the feed assistance member rotates and applies pressure to the medium in response to contacting the medium being moved by the at least one align roller.

36. (Previously Presented) The feed assistance apparatus of claim 18, wherein the member portion and the at least one align roller contacts the medium while the medium is moving along the second axis.

37. (Previously Presented) The feed assistance apparatus of claim 18, wherein the member portion rotates and applies pressure to the medium in response to contacting the medium being moved by the the at least one align roller.

38. (Currently Amended) A medium feeding apparatus comprising:  
at least one align roller to align a medium in a path, wherein the medium is positioned in a plane defined by a first axis and a second axis and transported along the second axis; and  
a feed assistance member comprising:  
(i) a shaft; and  
(ii) a [[a]] member mounted to the shaft and positioned to apply pressure on the medium in the path to stabilize the medium while the medium is being aligned in the path by the at least one align roller, wherein the member and the at least one align roller are offset with respect to the second axis, and wherein the member is non-rotatable.